



Faceting 101 - Lesson 5

Tricky Triangle

by Arya Akhavan (October 2012)

Angles for R.I. = 1.730

24 + 6 girdles = 30 facets

3-fold radial symmetry

96 index

L/W = 1.155

P/W = 0.432 C/W = 0.195

Vol./W³ = 0.224

PREFORM

- | | | | |
|----|--------|----------|---------------------|
| X1 | 40.00° | 96-32-64 | Cut to centerpoint. |
| X2 | 30.94° | 16-48-80 | Meet at culet. |
| G1 | 90.00° | 96-32-64 | Set stone size. |
| G2 | 90.00° | 16-48-80 | Level girdle. |

PAVILION

- | | | | |
|----|--------|----------|-------------------------|
| | 90.00° | 16-48-80 | (from preform) |
| | 90.00° | 96-32-64 | (from preform) |
| P1 | 47.12° | 96-32-64 | Cut to new centerpoint. |
| P2 | 45.11° | 16-48-80 | Level girdle. |
| P3 | 42.64° | 30-62-94 | Meet P1, P2 |

CROWN

- | | | | |
|----|--------|----------|---------------------|
| C1 | 52.50° | 96-32-64 | Set girdle width. |
| C2 | 33.09° | 16-48-80 | Level girdle. |
| C3 | 23.48° | 12-44-76 | Meet G1, G2, C1, C2 |
| C4 | 19.33° | 26-58-90 | Meet C1, C2, C3 |
| C5 | 7.56° | 03-35-67 | Meet C1, C3, C4 |

Lesson 5 is our first modern-style design, and it uses a triangle, NOT a trillion (there's no cushioning here). This lesson teaches how to use a CAM preform (non-retained CAM facets; X1, C2) to generate a girdle outline, how to cut radial symmetry instead of mirror symmetry, and how to cut an apex crown (C5).

Lesson rules: cut in rhodolite garnet, with no size restrictions

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